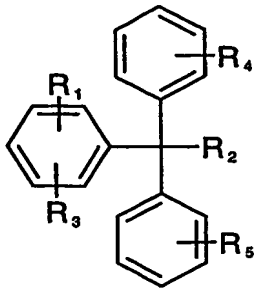
Claims

1. A process for preparing a compound of formula I



I

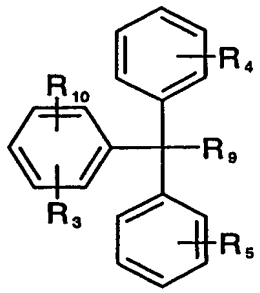
wherein R_1 is a reactive substituent or an attachment to a solid phase;

R_2 is a reactive substituent; and

R_3, R_4 and R_5 are each independently hydrogen or one or more substituents attached to each benzene ring and selected from hydroxy, amino, C_{1-10}-alkyl, C_{1-10}-alkoxy, C_{1-10}-alkylamino, di-C_{1-10}-alkylamino, carbamoyl, C_{1-10}-alkylcarbamoyl, di-C_{1-10}-alkylcarbamoyl, halo-C_{1-10}-alkyl, halogeno and nitro;

in free or salt form; comprising

(a) reacting a compound of formula VI with an electrophile:



VI

wherein R_3, R_4 and R_5 are as defined above;

R_9 is –OH, –OM or -OMX, where M is metal and X is a nucleophilic substituent;

R_{10} is –M or -MX, where M is metal and X is a nucleophilic substituent;

in free or salt form;

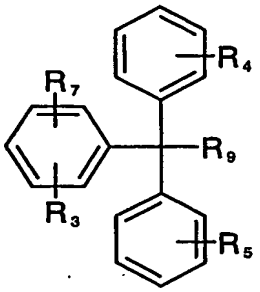
and hydrolyzing the resulting compound to form a compound of formula I wherein R_2 is hydroxy;

(b) optionally converting a compound of formula I wherein R_2 is hydroxy to a compound of formula I wherein R_2 is other than hydroxy;

(c) optionally converting R_1 in a compound of formula I to an alternative R_1 group;

(d) optionally deprotecting a compound of formula I in protected form; and
(e) where required, converting a compound of formula I obtained in free form into the desired salt form, or vice versa.

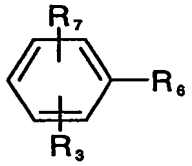
2. A process according to claim 1, wherein compound of formula VI is prepared by reacting a compound of formula V with a metal or organometallic compound:



V

wherein R_3, R_4, R_5 and R_9 are as defined above; and
R_7 is a nucleophilic substituent.

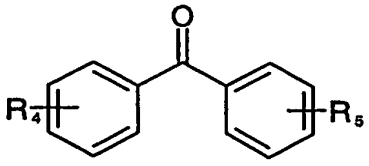
3. A process according to claim 2, wherein the compound of formula V is prepared by:
(i) reacting a compound of formula II with a metal or organometallic compound



II

wherein R_6 and R_7 are each a nucleophilic substituent and R_3 is as defined above and is protected if necessary by a removable protecting group; and

(ii) reacting the compound obtained in (i) with a compound of formula III

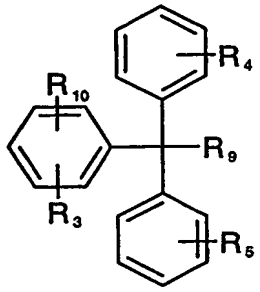


III

wherein R_4 and R_5 are as defined above and are protected if necessary by a removable protecting group.

4. A process for the preparation of a solid phase support system, comprising preparing a compound of formula I by a process as defined in any of claims 1 to 3, and coupling the compound with a suitably derivatised or functionalised solid phase material.

5. A compound of formula VI in free or salt form



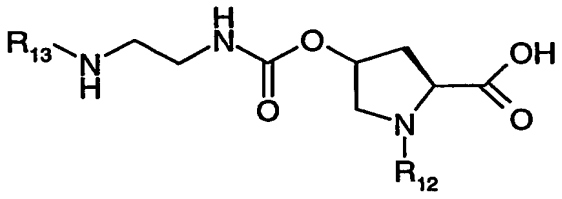
VI

wherein R_3, R_4 and R_5 are each independently hydrogen or one or more substituents attached to each benzene ring, and are selected from hydroxy, amino, C_{1-10}-alkyl, C_{1-10}-alkoxy, C_{1-10}-alkylamino, di-C_{1-10}-alkylamino, carbamoyl, C_{1-10}-alkylcarbamoyl, di-C_{1-10}-alkylcarbamoyl, halo-C_{1-10}-alkyl, halogeno or nitro, optionally protected by a removable protecting group;

R_9 is –OH, –OM or -OMX, where M is metal and X is a nucleophilic subtituent; and

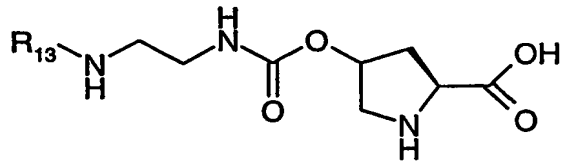
R_{10} is –M or -MX, where M is metal and X is a nucleophilic substituent.

6. A process for preparing a compound of formula VIII



VIII

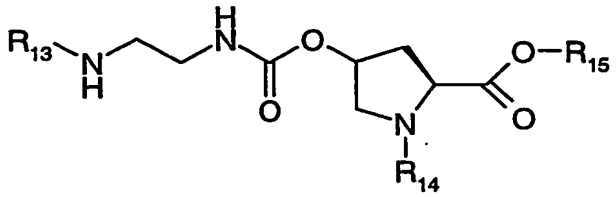
wherein R_{12} and R_{13} are each a removable protecting group and R_{12} and R_{13} are different; comprising reacting a compound of formula IX



IX

with a suitable R_{12} donor compound.

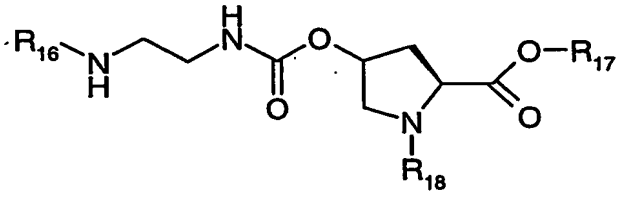
7. A process according to claim 6, wherein the compound of formula IX is prepared by (i) hydrolysing a compound of formula X



X

wherein R_{13} is as defined in claim 6,
R_{14} is a removable protecting group and R_{14} is different to R_{12} and R_{13}, and
R_{15} is a blocking group removable by hydrolysis or hydrogenolysis,
to obtain the corresponding carboxylic acid, and
(ii) removing the protecting group R_{14} in the resulting carboxylic acid.

8. A compound of formula XIV



XIV

wherein R_{16} is a removable protecting group other than fluorenylmethoxycarbonyl, and is different to R_{18};
R_{17} is hydrogen or a blocking group removable by hydrolysis or hydrogenolysis; and
R_{18} is hydrogen or a removable protecting group other than fluorenylmethoxycarbonyl.

9. A compound according to claim 8, wherein R_{16} is tert-butoxycarbonyl.

10. A process for producing a compound of formula VIII as defined in claim 6, wherein R_{12} is fluorenylmethoxycarbonyl and R_{13} is a removable protecting group other than fluorenylmethoxycarbonyl, comprising reacting a compound of formula IX with a fluorenylmethoxycarbonyl donor compound.